

R mark

Applicant respectfully requests reconsideration of this application as amended herein.

For the Examiner's information, Applicant filed another application concurrently with this application. It was Application No. 09/887,976, which issued on Nov. 26, 2002 as US Patent 6,486,627.

The Office Action Summary sheet in the Outstanding Office Action has an 'X' in box no. 2 under "Attachment(s)", however there was no Notice of Draftsperson's Patent Drawing Review attached

As suggested by the Examiner in the Outstanding Office Action, Applicant has carefully reviewed the specification for idiomatic and grammatical errors, and has made corrections in the amendments to the specification herein.

Claims 14-16 and 22-24 have been rejected under 35 USC 112 for failing to comply with the enablement requirement. Both of these claims include a limitation dealing with an input voltage range of a DC/DC converter. The Examiner has questioned the meaning of claimed expression "input voltage range" as used in claims 22 and 14, and also in the specification on the first full paragraph of page 11:

The configuration 70 also shows another embodiment of the invention. The control system 81 for the flywheel uninterruptible power supply continues to receive power during a utility interruption by the back flow through the antiparallel diodes, not shown, inside the inverter. This voltage decreases with the speed of the flywheel during a discharge. A DC-DC converter 80 is used to maintain constant voltage for the system control 81 by being connected to the direct current side of the inverter 76 that drives the flywheel motor/generator 78. The DC-DC converter 80 is preferably capable of a very wide input voltage range of greater than 4 to 1. The wide range allows the magnetic bearings, if used, to maintain levitation until the flywheel speed is sufficiently low.

The input voltage range is the ratio of maximum input voltage to minimum input voltage that will produce an output voltage at the desired value at the output of the DC/DC

converter. It is the range of input voltage that the converter can accept while still producing an output at the desired voltage. The Examiner also asked if this was conventional terminology related to DC/DC converters. Applicant is enclosing a copy of a DC/DC converter specification sheet that shows, in the highlighted portion at the top of the table on page 1, the use of this conventional terminology. This converter has an input voltage range of about 2:1, which is common for most converters. Some special ones have greater ranges such as Code 7 from this manufacturer, which is 375/100 or nearly 4 to 1. This document can be viewed in PDF format on the web at the following URL:

http://www.vicr.com/documents/datasheets/ds_vl-200.pdf

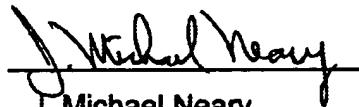
Claims 27 and 28 have been rejected under 35 USC 102 as anticipated by Patent No. 5,801,937 to Gold et al. Gold et al teaches use of a transformer for coupling the energy from an energy storage source to the primary power source and the load for the purposes of providing "quasi standby mode but have the characteristics on an inline device". These systems "provide input and output power quality, extend battery life and prevent transients on the line from being seen by the load." - column 2, line 66.

In contrast, Applicant's invention as defined in claim 27 uses a transformer only for step down of input power to match load power requirements, typically of some distributed telecommunications equipment that run on reduced alternating current voltage such as 60 -90 VAC for CATV. The coupling between the load, primary power and energy from the flywheel is provided by the transfer switch, resulting in an offline characteristic. The energy storage of the flywheel thereby does not provide any power quality improvement during operation of primary power, nor is it used for prevention of line transients from being seen by the load.

To further emphasize the distinction of the invention defined in claims 27 and 28, Applicant has amended these claims to call for the output regulator that is especially suited to distributed telecommunications equipment that run on reduced alternating current voltage such as 60 -90 VAC for CATV, in particular. The combination defined in claims 27 and 28 is not disclosed in Gold et al.

Accordingly, Applicant believes that the claims now pending in this application are patentable and respectfully requests the Examiner to pass this application to issue.

Respectfully submitted,



J. Michael Neary
Attorney for Applicant
Reg. No. 25,453

542 SW 298th Street
Federal Way, Washington 98023
voice: (253) 941-7683; fax: (253) 941-3623